

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT			1. CONTRACT ID CODE		PAGE OF PAGES 1 4	
2. AMENDMENT/MODIFICATION NO. 4		3. EFFECTIVE DATE See Block 16C		4. REQUISITION/PURCHASE REQ. NO.		5. PROJECT NO. (If applicable)
6. ISSUED BY John F. Kennedy Space Center, NASA Procurement Office – ODIN – OP-OS-ODIN Kennedy Space Center, FL 32899		CODE		7. ADMINISTERED BY (If other than Item 6)		CODE
8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State, and Zip Code) OAO Corporation 7375 Executive Place Seabrook, MD 20706-2278				(x)		9A. AMENDMENT OF SOLICITATION NO.
						9B. DATED (SEE ITEM 11)
						10A. MODIFICATION OF CONTRACT/ORDER NO. NAS5-98144/NNK05OA12D
						10B. DATED (SEE ITEM 13) December 1, 2004
CODE		FACILITY CODE				
11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS						
<p><input type="checkbox"/> The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers <input type="checkbox"/> is extended, <input type="checkbox"/> is not extended.</p> <p>Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods:</p> <p>(a) By completing Items 8 and 15, and returning ____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.</p>						
12. ACCOUNTING AND APPROPRIATION DATA (If required)						

13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS, IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.	
	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.
	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).
X	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF: NAS5-98144 Contract Clause C.7 Technology Refreshment Process and FAR Clause 52.212-4 Contract Terms and Conditions-Commercial Items, (c) Changes
	D. OTHER (Specify type of modification and authority)

E. IMPORTANT: Contractor ☐ is not, ☒ is required to sign this document and return **1** copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)

Stennis Space Center --- ODIN SERVICES

Technology Infrastructures: Incorporation of SWR P203 5NTV 13

Change in Delivery Order Price: \$59,432.32 (INCREASE)

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER (Type or print) Sheryl K. Weimann Contracts Manager		16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print) Penelope A. Hale Contracting Officer	
15B. CONTRACTOR/OFFEROR <i>Sheryl K. Weimann</i> (Signature of person authorized to sign)	15C. DATE SIGNED 2/9/05	16B. UNITED STATES OF AMERICA BY <i>Penelope A. Hale</i> (Signature of Contracting Officer)	16C. DATE SIGNED 2/10/2005

1. In accordance with Master Contract NAS5-98144, C.7, Technology Refreshment Process, the technology refreshment services referenced below is hereby incorporated into this Delivery Order at a fixed price of \$59,432.32.

SWR #	Subject	Amount
P203 5NTV 13	Install fiber, Cat5 and Cat3 wiring to support video broadcast in B1105 and B4110 for NASA	\$59,432.32

2. SWR P203 5NTV 13

The contractor shall provide the labor (including, but not limited to, engineering, configuration management, user coordination/scheduling, wiring/cabling (IEEE 802.3, EIA/TIA Building Wiring Standards, National Electric Code, and Fire Protection Code, as applicable), and equipment installation) and materials necessary install fiber, Cat5 and Cat3 wiring to support video broadcast in B1105 and B4110 for NASA as outlined in OAO proposal dated January 20, 2005. Installation will include testing, labeling, and configuration documentation (red line drawings).

- a. The contractor shall be responsible for performance of the following tasks:

Boe-Tel:

- (1) Install (1) 24mm/72sm fiber cable from room 116 in B1201 to room C311 in B1105.
- (2) Install (1) 48sm fiber cable from room C311 to room A105 in B1105.
- (3) Install (1) 6sm fiber cable from room C311 to room B229 in B1105.
- (4) Install (1) 12sm fiber cable from room B101 up to new weatherproof box placed by MSS on the outside of the building 4110.
- (5) Install (1) LGX-144 fiber panel in room 116 of B1201.
- (6) Install (1) LGX-144 fiber panel in room C311 of B1105.
- (7) Install (1) LGX-72 fiber panel in room C311 of B1105.
- (8) Install (1) LGX-72 fiber panel in room A105 of B1105.
- (9) Install (1) 6-port surface mount fiber box in room B229 of B1105.
- (10) Install (2) LIU fiber panels in room B101 of B4110.
- (11) Install (6) dual telephone jacks in weatherproof box on the outside of B4110.
- (12) Install (3) dual Cat5e jacks in weatherproof box on the outside of B4110.
- (13) Install (6) 4-pair Cat3 wires from room B101 up to weatherproof box on the outside of B4110 and terminate one end in (6) dual telephone jacks installed in item (11) above and the other end on existing 110 wiring blocks in room B101.
- (14) Install (6) 4-pair Cat5e wires from room B101 up to weatherproof box on the outside of B4110 and terminate one end on the (3) dual Cat5e jacks and the other end on existing 110 wiring blocks in room B101.
- (15) Terminate all fiber into ST connectors and place fiber into LGX and LIU panels.
- (16) Test and label fiber cables.
- (17) Test and label Cat5e wiring.
- (18) Test and label Cat3 wiring.
- (19) Provide OAO with a redline drawing showing routes taken inside buildings and show jack numbers of Cat5e and Cat3.
- (20) Install (1) 24-strand singlemode fiber from room 116 to room 174 in B1201.

OAO:

- (1) Will re-arrange some equipment in room 174 of B1201 video head end to make room for the new equipment that is being purchased by CSC or NASA.
- (2) Install new GFE channel combiners in equipment racks in room 174 of B1201.

- (3) Install new GFE modulators in equipment racks in room 174 of B1201.
- (4) Install new GFE fiber transmitters and receivers in equipment racks in room 174 of B1201.
- (5) Install new fiber jumpers between buildings to activate GFE equipment to the video head end in room 174 of B1201.
- (6) Fabricate new video, audio and CATV jumpers to be used with new GFE equipment.
- (7) Install new GFE audio, video and CATV jumpers to activate new equipment in room 174 of B1201.
- (8) Assist CSC in the configuration of new GFE equipment in room 174 of B1201.
- (9) Assist CSC in testing of new GFE equipment installed above.
- (10) Install all fiber jumpers in each building to get circuits back to room A105 in B1105.

b. The contractor shall provide the following material:

- (1) 4,400 feet of Corning 24mm/72sm Altos fiber cable (096XW4-TBD)
- (2) 1,200 feet Belden Cat5e blue plenum wire (CMP-00424BEL-5U-06)
- (3) 1,200 feet of Avaya Cat3 plenum wire (CMP-00424MAX-3U)
- (4) 500 feet of Corning MIC 6-strand singlemode fiber cable (370-948-SMODE-06)
- (5) 372 each cool cure consumables (142172)
- (6) 340 feet of Corning MIC 48-strand singlemode fiber cable (370-948-SMODE-48)
- (7) 324 each P3020A-C-125 singlemode ST connectors (157475)
- (8) 200 feet of Corning MIC 12-strand fiber cable (370-948-SMODE-12)
- (9) 180 feet of Siecor 24-strand singlemode fiber cable (GFE)
- (10) 152 each C3000A-2 singlemode ST couplers (105263)
- (11) 144 each A3000 singlemode ST couplers (184326)
- (12) 48 each P2020C-C-125 multimode ST connectors (170290)
- (13) 48 each A2000A-2 multimode ST connectors (184324)3
- (14) 12 each 110C-4 connectors (073039)
- (15) 6 each Avaya M81 ST modular couplers (190662)
- (16) 6 each Ortronics dual USOC Cat3 jack (148035)
- (17) 4 each Avaya 100A LIU's (146050)
- (18) 4 each Avaya 10A fiber panels (088980)
- (19) 3 each Plymouth vinyl tape (T-818)
- (20) 3 each Ortronics T568A/B dual Cat5e jacks (248945)
- (21) 3 packs of Avaya 1000ST fiber panels (106730)
- (22) 2 each Avaya LST1U-72/7 (106722)
- (23) 2 packs of Avaya 1200ST fiber panels (178743)
- (24) 2 each Avaya LST1U-72/7 (106722)
- (25) 2 packs of Premier black cable ties (739308)
- (26) 1 each Avaya M106SMB 6-port surface mount box (169621)
- (27) 1 each Panduit outlet box (201336)
- (28) 1 each Ortronics singlegang faceplate (148025)
- (29) 1 each Panduit dual gang outlet box (203852)
- (30) 1 each Ortronics dual gang faceplate (148026)
- (31) 2 each 60-feet singlemode ST/SC fiber jumpers (FSMD-2277-60F)
- (32) 10 each 10-meter singlemode ST/SC fiber jumpers (152040)
- (33) 10 each 2-feet singlemode ST/ST fiber jumpers (FSMD-2222-2F)
- (34) 10 each 2-meter singlemode ST/ST fiber jumpers (151987)
- (35) 8 each 15-meter singlemode ST/SC fiber jumpers (FSMD-2277-15M)
- (36) 8 each 5-feet singlemode ST/ST fiber jumpers (FSMD-2222-5F)

- (37) 8 each 1-meter singlemode ST/ST fiber jumpers (151986)
- (38) 4 each 5-meter singlemode ST/ST fiber jumpers (151989)
- (39) 40 each 4-foot singlemode ST/ST fiber jumpers (FSMD-2222-4F)
- (40) 30 each 4-meter singlemode ST/ST fiber jumpers (FSMD-2222-4M)
- (41) 20 each 4-meter singlemode ST/SC fiber jumpers (FSMD-2277-4M)
- (42) 20 each 3-meter singlemode ST/SC fiber jumpers (152038)
- (43) 20 each 2-meter singlemode ST/SC fiber jumpers (152037)

- c. Schedule: The completion of this effort shall be (16) sixteen weeks after receipt of a signed modification.
3. Part II "Contract Administration Data", Item 4, is revised as indicated below to incorporate the increase of \$59,432.32 for this infrastructure upgrade:

	<i>Initial Estimate</i>	<i>Thru mod 4</i>
Ordered Seats and Services	\$ 14,974,870.00	\$ 14,581,475.32
Catalog Services	\$ 500,000.00	\$ 382,470.23
Specialized Services	\$ 50,000.00	\$ 49,350.00
Infrastructure upgrades	\$ 1,000,000.00	\$ 878,698.57
Fast Track Mods Authorized	\$ -	\$ -
Subtotal	\$ 16,524,870.00	\$ 15,891,994.12
Less credits	\$ -	\$ -
Less outages	\$ -	\$ (604.88)
Less retainage not earned	\$ -	\$ -
Subtotal	\$ -	\$ (604.88)
Total Estimated Delivery Order Value	\$ 16,524,870.00	\$ 15,891,389.24

4. Part V "Technology Infusion (Infrastructure Upgrades)", Item 2 is modified to include the subject infrastructure upgrades. The signed date and completion date will be completed in a future infrastructure upgrade modification.

Mod	Description	Date Signed	Date Completed	Amount
4	P203 5NTV 13 Install fiber, Cat5 and Cat3 wiring to support video broadcast in B1105 and B4110 for NASA			\$59,432.32

5. Payment Schedule: Invoicing and Payment for this modification will be made in accordance with Master Contract NAS5-98144, FAR 52.212-4: Commercial Items (May 1997) (Modified).
6. Reporting requirements: The contractor shall provide monthly status reports to the SSC DOCOTR, with a copy to the DOCO. These reports shall include, as a minimum, installation progress, and potential problem areas.

7. In consideration of the modification agreed to herein as complete equitable adjustment for the changes set forth, the Contractor hereby releases the Government from any and all liability under this delivery order for further equitable adjustments attributable to such facts or circumstances giving rise to these changes.
8. All other terms and conditions of this Delivery Order remain unchanged and in full force and effect.